A Rubric to Evaluate Core Data Management Plan Components

DART PROJECT

Data management plans as **A R**esearch **T**ool
http://bit.ly/dmpresearch
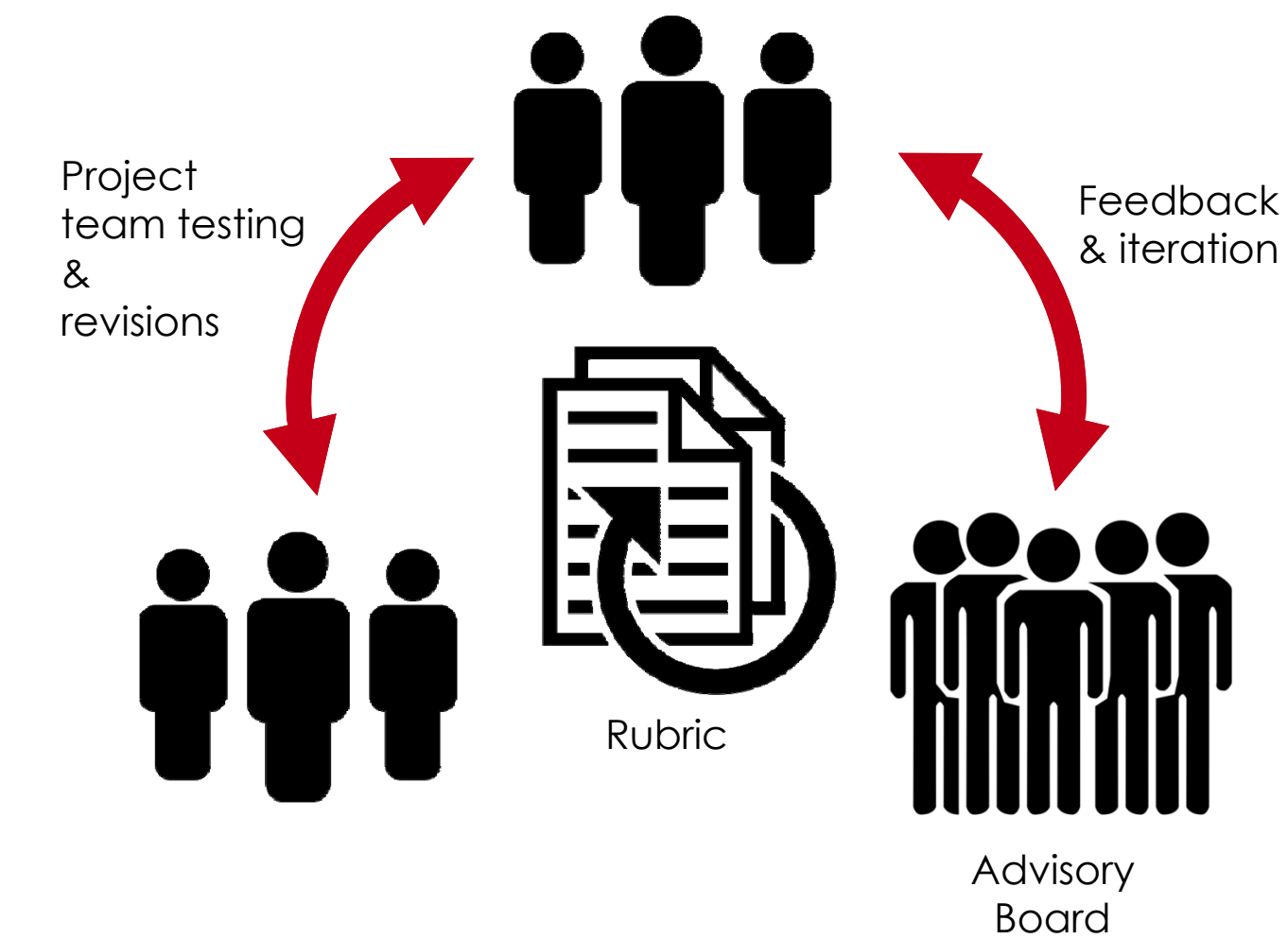@DMPResearch

The Project

A multi-institutional project to develop and use an analytic rubric to evaluate data management plans that have been submitted to the National Science Foundation (NSF) at five academic research institutions.
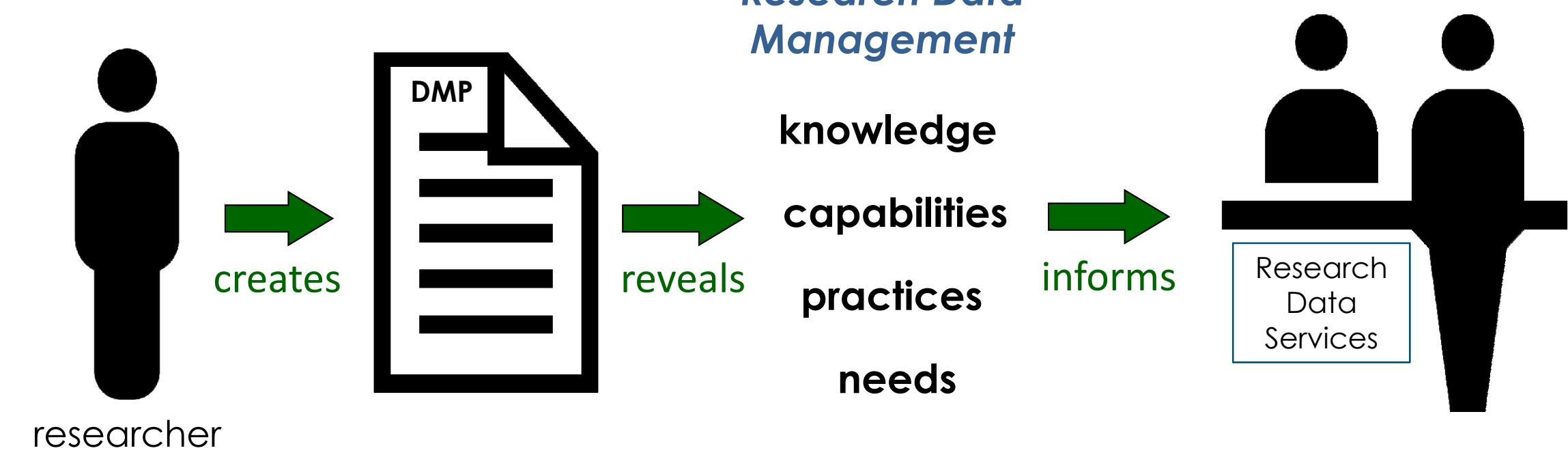
Outputs

1) An **analytic rubric** to standardize the review of data management plans as a means to inform research data services at academic institutions and other research organizations.

2) A study utilizing the rubric that presents the results of **data management plan analyses** at five universities.
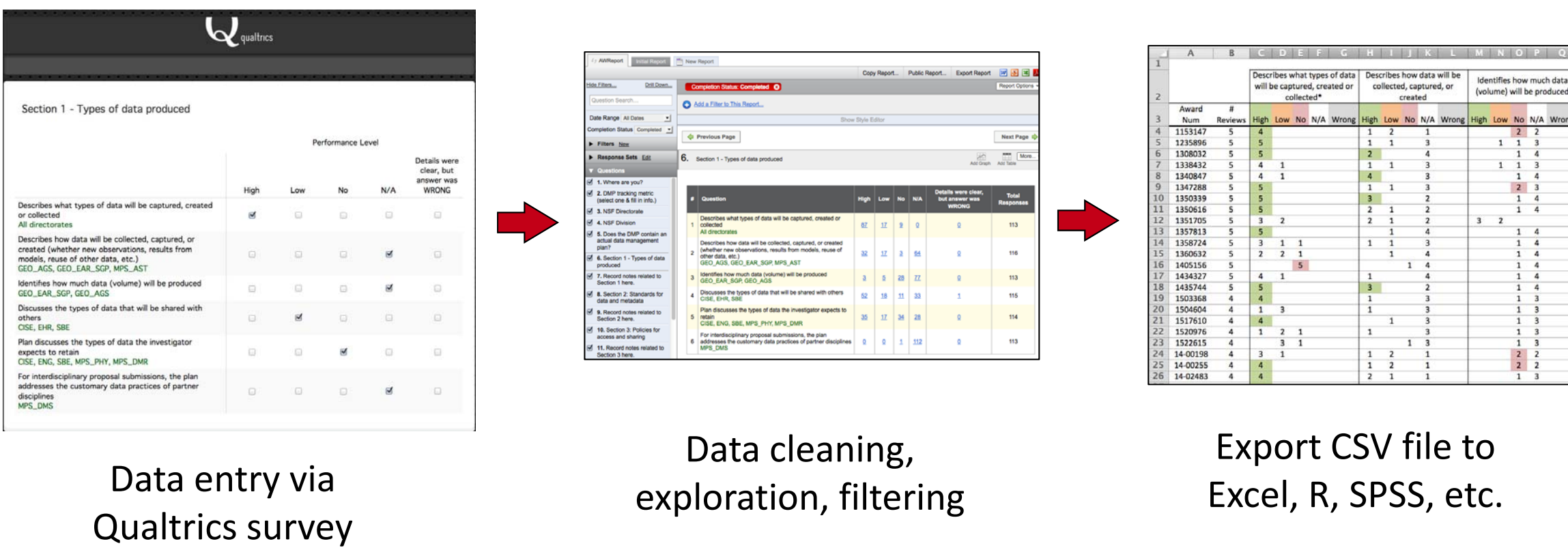
Project Phases

1) Acquire access to DMPs
2) Prototype, test and refine analytic rubric
3) Use rubric to analyze DMPs at 5 research intensive US universities
4) Share results of analyses and apply to research services and infrastructure
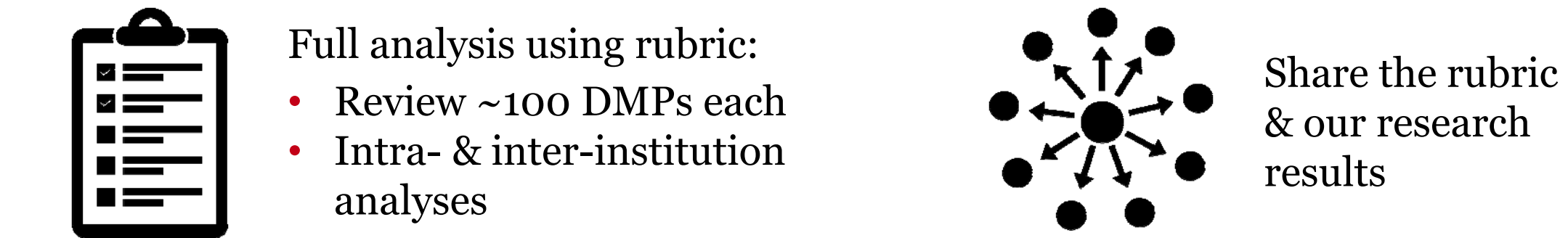5) Finalize & share rubric

Project team testing & revisions

Feedback & iteration

Rubric

Advisory Board

Premise

researcher — creates → DMP — reveals →

Research Data Management

knowledge

capabilities

practices

needs

— informs → Research Data Services

Current Workflow

Data entry via Qualtrics survey

Data cleaning, exploration, filtering

Export CSV file to Excel, R, SPSS, etc.

What's Next?

Full analysis using rubric:
- Review ~100 DMPs each
- Intra- & inter-institution analyses

Share the rubric & our research results

Project Team

Amanda L. Whitmire — Oregon State University Libraries
Jake Carlson — University of Michigan Library
Patricia M. Hswe — Pennsylvania State University Libraries
Susan Wells Parham — Georgia Institute of Technology Library
Lizzy Rolando — Georgia Institute of Technology Library
Brian Westra — University of Oregon Libraries

The Rubric

A rubric is a descriptive scoring tool. An analytic rubric collects detailed information about sub-components of the work being assessed, through independent evaluation of various criteria. Excerpts of two sections of the rubric are shown below (*please note*: this is not the finalized rubric, and display logic controls the question displayed based on the NSF directorate and division of the DMP).

Q12. Section 3: Policies for access and sharing

	Complete / detailed	Addressed issue, but incomplete	Did not address the issue
Provides details on **when** the data will be made publicly available. All directorates	○	○	●
Describes **how** the data will be made publicly available. All directorates	●	○	○
Describes **security** measures that will be in place to protect the data from unauthorized access. All directorates	○	○	●
Describes **how long** the data will be retained and made available to people outside of the project. CISE; EHR; ENG GEO AGS; MPS AST, MPS PHY; SBE	○	○	○
Describes **data types or formats** that will be used for **making data available**. CISE; ENG; EHR; SBE; BIO; GEO OCE; GEO EAR SGP; GEO AGS; MPS AST; MPS CHE	●	○	○

Q13. Section 3: Policies for access and sharing

	Complete / detailed	Addressed issue, but incomplete	Did not address the issue	N/A Select N/A if this statement is not relevant to the DMP
IF there are **factors that limit the ability to share** data, e.g. commercialization or proprietary nature of the data, plan describes those conditions and describes to whom the data will be made available and under what conditions. EHR; ENG; GEO AGS; GEO OCE	○	○	○	○
IF data are submitted to supplementary materials sections of peer-reviewed **journals**, describes plans to do so. MPS CHE	○	○	○	○
IF the data are deemed to be of a "sensitive" nature, describes what protections will be put into place to **protect privacy or confidentiality** of research subjects. All directorates	○	○	○	●
IF project personnel plans to retain IP, describes what **intellectual property rights** to the data and supporting materials will be given to the public and which will be retained by project personnel (if any). All directorates	●	○	○	○

U.S. Department of the Interior
U.S. Geological Survey

COMMUNITY FOR DATA INTEGRATION

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